

1 **DISK DRIVE FOR CIRCULAR SELF SERVO WRITING AND SPIRAL SELF**  
2 **SERVO WRITING USING PREWRITTEN REFERENCE SERVO BURSTS**

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4 **ABSTRACT OF THE DISCLOSURE**

5 A disk drive is disclosed comprising a disk and a head actuated radially over the disk. An  
6 external servo writer is used to write reference servo bursts to the disk at a coarser radial  
7 resolution than product servo bursts. During a self servo writing operation, the reference servo  
8 bursts are processed to servo circularly to write a first set of product servo bursts to the disk.  
9 The reference servo bursts are also processed to servo spirally to write a second set of product  
10 servo bursts to the disk.

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